Social and economic value of sport and physical activity

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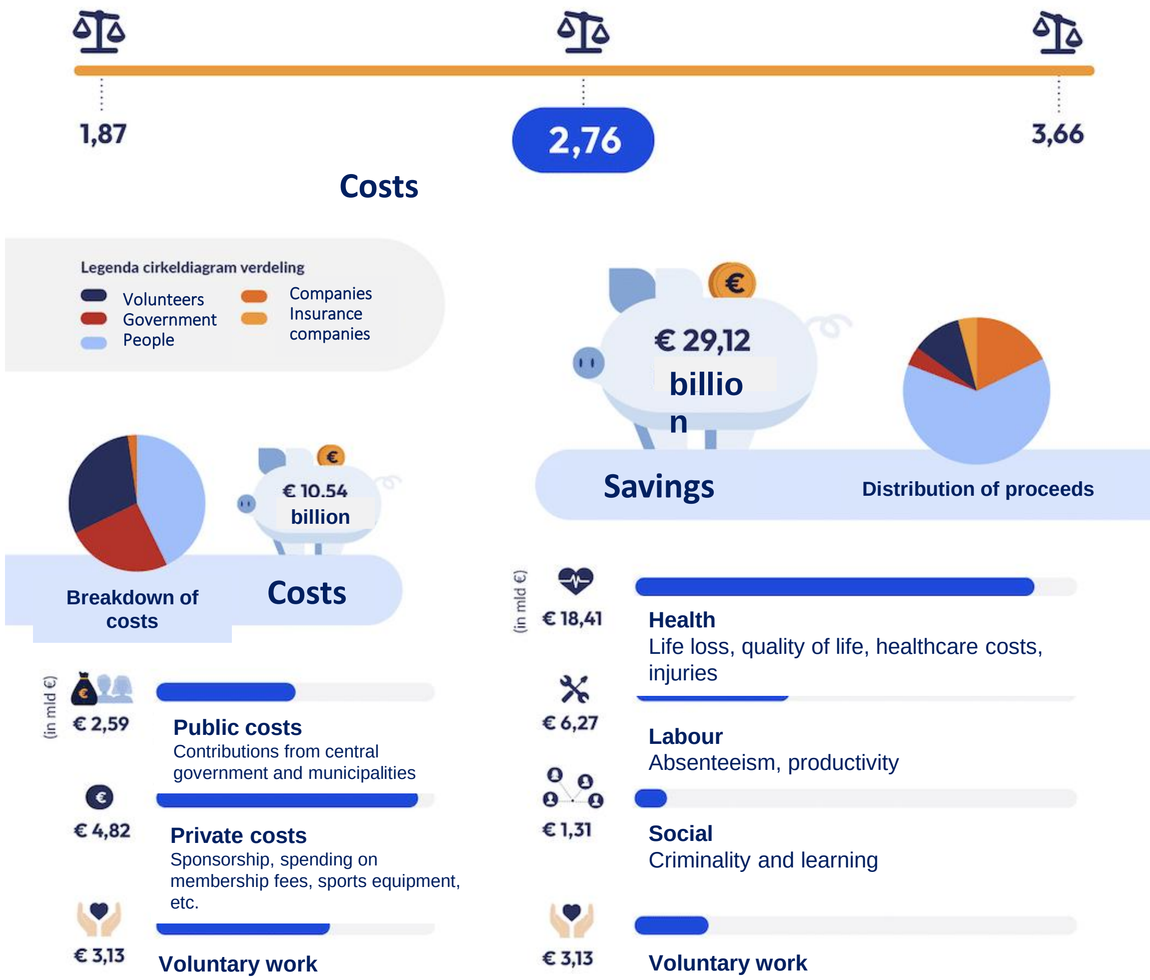
The SROI of sport and Physical Activity

If you want to combat the unaffordable healthcare costs, an unhealthy nation, then you have to invest in sports and physical activity...
AND SCIENTIFICAL PROOF…

Results Netherlands
SROI = € 2.76



SROI -tool
of sports and physical activity

Sheffield Hallam University | Sport & Physical Activity Research Centre


SROI for Sport and Physical Activity in England
Base Model - 2017/18
INPUTS
Public sector £2.44bn
Participants £13.69bn
Volunteers £5.71bn
£21.85 billion
OUTCOMES
Physical and Mental Health £9.59bn
Reduced CHD/Stroke, Type 2 Diabetes, Breast Cancer, Colon Cancer, Dementia, Depression, good health, hip fractures, back pain and increased sport injuries
Mental Wellbeing £41.76bn
Improved subjective wellbeing of participants and volunteers
Individual Development £282m
Improved educational attainment and enhanced human capital
Social & Community Development £19.97bn
Improved social capital, crime reduction and non-market value for organisations utilising sports volunteers
£71.61 billion
SROI = 3.28
For every £1 spent on sport and physical activity in England, £3.28 worth of social impacts are generated

SROI for Sport and Physical Activity in England

Forecast Model

	Forecast if 500,000 people more regularly active	Forecast if 250,000 women more regularly active	Forecast if 100,000 people more regularly active
Physical and Mental Health	£130.5m	£68.2m	£26.1m
Mental Wellbeing	£636.8m	£318.4m	£127.4m
Individual Development	£5.0m	£2.5m	£1.0m
Social & Community Development	£291.1m	£145.1m	£58.2m
Total value of outcomes	£1.06bn	£534.1m	£212.7m

Important social impacts

<u>Subjective Wellbeing (SWB)</u> is an indication of happiness or contentment based on the personal evaluation of individuals (through questionnaires).

<u>Social Capital (SC)</u> is a measure of social integration of an individual with the community through friendships, family, and associations with organisations:

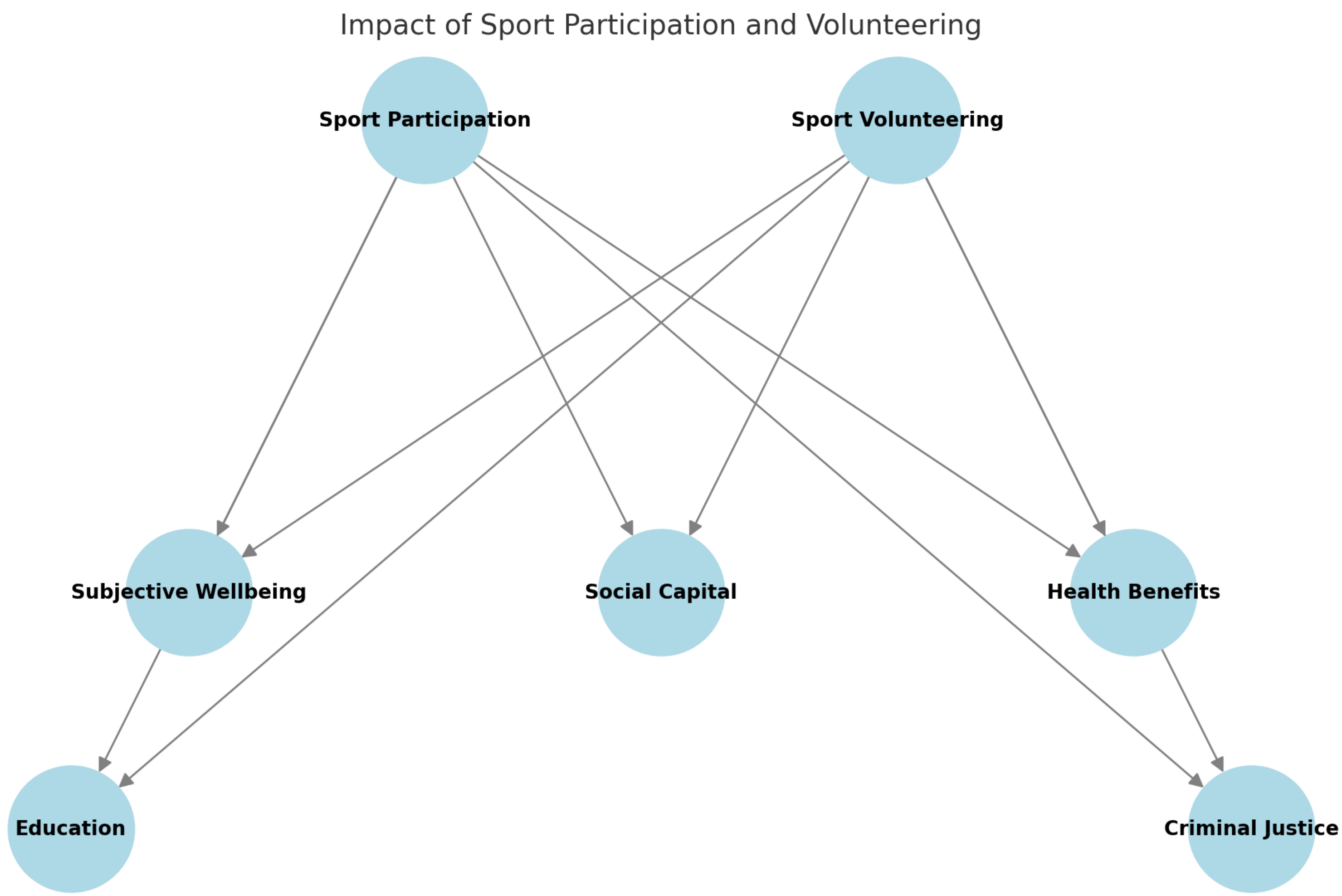
SC: an aggregated measure of resources derived from durable networks of 'more-or-less institutionalized' relationships and social structures that members can use in the pursuit of their own interests (Bourdieu, 1985)

the resources that are accessed by individuals as a result of their membership of a network or group (Kawachi et al., 2000)

SC and SWB relate to outcomes such as mental health, individual development and social integration/ development.

Both Subjective Wellbeing and Social Capital can be practically defined and monetised.

Social Value



Social Value

Most important effects: SWB, Social capital, and Health.

Effect on education needs further investigation, especially in terms of causality direction.

Major study:

HUMAN KINETICS JOURNALS

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Striving for Global Consensus: A Systematic Review of Social Return on Investment Applied to Physical Activity and Sport

in Journal of Physical Activity and Health

Click name to view affiliation

Inés Nieto *, Xián Mayo, Larissa Davies, Lindsey Reece, Ben Strafford, and Alfonso Jimenez

DOI: https://doi.org/10.1123/jpah.2024-0174

Social Value

Category	Subcategory
Health	Physical health
	Mental health
	Other impacts from improved health
Crime	No subcategories specified
Education	Improved educational attainment
	School absenteeism
	Skills acquisition
	Other impacts from improved education
Subjective well-being	General well-being
	Quality of life
	Life satisfaction
	Happiness
	Motivation
	Confidence and self-esteem
	Other
Social capital	Networks and relationships
	Sense of identity and belonging
	Community engagement
	Inclusion, integration, and equality
	Trust

SWB, Social Capital

- According to Eurostat, SWB comprises three distinct yet interrelated sub-dimensions:
- •	Life satisfaction (or evaluation), which refers to an individual's cognitive overall assessment of their life.
- •	Affects, encompassing the presence of positive emotions like joy and the absence of negative emotions such as sadness or anger.
- •	Eudemonics, involving the sense that one's life holds meaning and purpose.

SWB and sport volunteers (20% happier)

	Average SWB score
Sport volunteers	65.8
No sport volunteers	54.8

Sport Volunteers have Wellbeing scores 20% higher than non volunteers

SC1 and sport volunteers (22% more social capital)

	Average SC1 score
Sport volunteers	31.8
No sport volunteers	26.0

Sport volunteers acquire 22% more social capital (according to SC1) than non volunteers

Sport Volunteering Inequalities-Gender

	% Sample	%Volunteers
Females	43.5%	33.0%
Males	56.5%	67.0%
	100%	100%

Sport Volunteering Inequalities-working status

Working status	Sample %	Volunteers %
Working full time	65.4%	73.8%
Working part time	**11.5%**	**10.2%**
Home duties	**3.2%**	**1.6%**
Students	4.7%	5.5%
Unemployed	**6.7%**	**3.1%**
Retired	**8.5%**	**5.8%**
	100%	100%

SWB, Social Capital

- Income compensation
- • $IC = \bar{Y} - e$^ {ln(Y)−(β2/ β1)}
- Where: β1 pertains to the connections between income and SWB (or Social capital), while β2 relates to the association between SWB (or Social Capital) and sport participation or volunteering. The symbol $\bar{Y}$ represents the average annual disposable income of an individual in each specific case under consideration.
- The estimation involves four income compensations:
- (i) Impact of sport participation on SWB
- (ii) Impact of sport participation on Social Capital
- (iii) Impact of sport volunteering on SWB
- (iv) Impact of sport volunteering on Social Capital.

Health Benefits- Case Study of Ireland

Condition	Population group	Risk reduction
Physical health		
CHD / stroke	All adults	25%-35%
Breast cancer	Adult females	20%
Colon cancer	All adults	19%-30%
Type 2 diabetes	All adults	35%-40%
Hip fractures	Older adults	66%-68%
Back pain[39]	All adults	25%
Hypertension	All adults	33%
Mental health		
Dementia	Older adults	30%
Depression	All adults	30%-48%

Health Benefits- Case Study of Ireland

Condition	Population group	Prevalence rate
Physical health		
CHD / stroke[41]	All ages	1.76%
Breast cancer[42]	Females (all ages)	0.14%
Colon cancer[39]	All ages	0.04%
Type 2 diabetes[43]	Ages 20-79	3.98%
Hip fractures[44]	Ages 60+	0.39%
Back pain[45]	All ages	8.73%
Hypertension		
Mental health		
Dementia[46]	Ages 65+	7.25%
Depression[47]	Ages 16+	6.00%

Health Benefits- Case Study of Ireland-diabetes

Prevalence rate among inactive adults: 4.60%

Prevalence rate among active adults: 2.76%

Annual benefits of sport volunteering / sport participation

		Per sport volunteer	Per sport participant	volunteering vs participation
		Euros	Euros	Per cent
Physical and Mental Health				
Dementia		250.0	179.6	139%
Depression		8.0	5.9	136%
Mental Wellbeing				
Subjective Wellbeing		2,248.0	1,612.9	139%
Individual development				
Improved educational attainment		0.5	0.2	215%
Enhanced human capital (improved salaries)		39.5	14.3	276%
Social and community development				
Reduced crime		5.5	2.0	276%
Social Capital		2,018.0	734.5	275%

Policy Recommendations

- The effect of sport participation on health and related budgets should be evaluated, as it has become an important topic leading to direct savings on public spending, against the backdrop of constantly rising health care expenditure.

- Beyond health, it is important to examine the mayor effects of sport on wellbeing and social capital , monetising its effect by using an econometric method if possible.

- Investigate the causality effect between sport participation/ volunteering and education attainment in both directions.

Policy Recommendations

- Use the set of 14 key indicators to monitor the sport economy and generated inequalities.
- Team sport can be more effective in reducing mental illness and voluntarism more effective in generating sport capital
- Promote inclusive, community-based sport facilities that accommodate all needs and may attract and be accessed by non-sport participants.
- Workplace Initiatives: Workplace health promotion programs should include activities like walking meetings, lunchtime sports groups, or corporate challenges.

Final Comment: Value in Community

- One way that an investment in sport facilities can be linked to wellbeing and social capital benefits is by leading to increases in sport participation /volunteering.
- By using the results before for a single sport participant/ volunteer, we can calculate a social impact of investment for the community.
- For example, if a local investment generates an extra 100 sport volunteers, then in terms of generated wellbeing (SWB) there is an increase of 100x2,248 euros in the community.
- The same logic can be followed in Social Capital. The results should not be unconditionally aggregated but used to describe different characteristics of social benefits for the community.

Methodology: Input-Output-Analysis / Input-Output-Tables

Where to deliver („use“)

		Intermediate supplies			Σ	Final Demand					Total Use
		Good 1	Good 2	Good 3		Private Consumption	Governmental Consumption	Investment	Stock change	Exports	
Intermediate Supplies	Good 1	7	2	2	11	24	2	1	0	3	**41**
	Good 2	5	15	4	24	5	6	3	2	10	**50**
	Good 3	3	3	11	17	8	12	0	0	2	**39**
Σ Domestic inputs		15	20	17	52						
Import of intermediate goods		5	8	1	14						
Total intermediate consumption		**20**	**28**	**18**	**66**						
	Personnel Costs	12	9	18	39						
	Taxes/Subsidies	2	3	0	5						
	Depreciation	6	5	2	13						
	Profits	1	5	1	7						
Σ Gross Value Added		**21**	**22**	**21**	**64**						
Gross Production Value		**41**	**50**	**39**	**130**						

Production function („supply“)

TECHNICAL- Vilnius definition

A	B	C	D	E	F
	General discription	**Sport content**		Estimated shares	**Sources**
1.19	Growing of other non-perennial crops/ forage crops	Agricultural service activities necessary for growing of bush for racehorses			
1.43	Raising of horses and other equines	Farming/Breeding of racehorses			
1.62	Support activities for animal production	Breeding of racehorses (e.g. artificial insemination of racehorses), Cleaning of racehorse stable			LFS, Business monitors
10.86	Manufacture of homogenised food preparations and dietetic food	Manufacture of dietary supplement (for athletes)			LFS, Business monitors
10.91	Manufacture of prepared feeds for farm animals	Prepared feeds for race horses			LFS, Business monitors
11.07	Manufacture of soft drinks; production of mineral waters and other bottled waters	Production of energy drinks used during sports activities			LFS, Business monitors
13.92	Manufacture of soft furnishings, manifacture of canvas goods, manufacture of household textiles	Manufacture of sails for boats; Manufacture of sleeping bags; Manufacture of parachutes;			LFS, Business monitors
13.94	Manufacture of cordage, rope, twine and netting	Manufacture of rope used für sports activities (climbing)			LFS, Business monitors
14.11	Manufacture of leather clothes/apparel of leather or of composition of leather	Manufacture of leather clothes used for motorsports activities			LFS, Business monitors
14.12	Manufacture of workwear	Manufacture of workware used for sports activities (e.g. pilot jackets)			LFS, Business monitors
14.13	Manufacture of other outerwear	Manufacture of other outerwear used for sports activities; Manufacture of riding dresses; swimwear			LFS, Business monitors
14.14	Manufacture of underwear	Manufacture of underwear used for sports activities (e.g.: skiing)			LFS, Business monitors
14.19	Manufacture of other wearing apparel and accessories n.e.c.	Manufacture of caps used for sports activities (e.g.: skiing); Manufacture of gloves used for sports activities (e.g.: skiing); Manufacture of tracksuits; Manufacture of skisuits; rugby; marine; cycling; leather riding boots.		26-31%	PRODCOM DATA
15.12	Manufacture of luggage, handbags and the like, saddlery and harness	Manufacture of saddle goods		10%-26%	PRODCOM DATA

Major changes of the Vilnius definition

Characteristic/connected goods instead of core/narrow/broad.

Differentiation between active and passive sport consumption.

Entire consumption of sport tourists is included.

Characteristic Goods 1/2

So far core, narrow and wide definition.

To be replaced by sport characteristic and connected goods.

Characteristic goods are those “close” to sport. Currently, it is those activities where sport is done (sport services, education, police-/defense services);

Characteristic Goods 1/2

- "Characteristic products are those that are typical of the field; for instance, for health, characteristic products are health services, public administration services, education and R&D services in health."

- "For characteristic products, the satellite account should show the way these goods and services are produced, what kinds of producers are involved, what kinds of labour and fixed capital they use and the efficiency of the production process and, hence, of the allocation of resources."

European Experience of Sport Satellite Accounts (SSA)

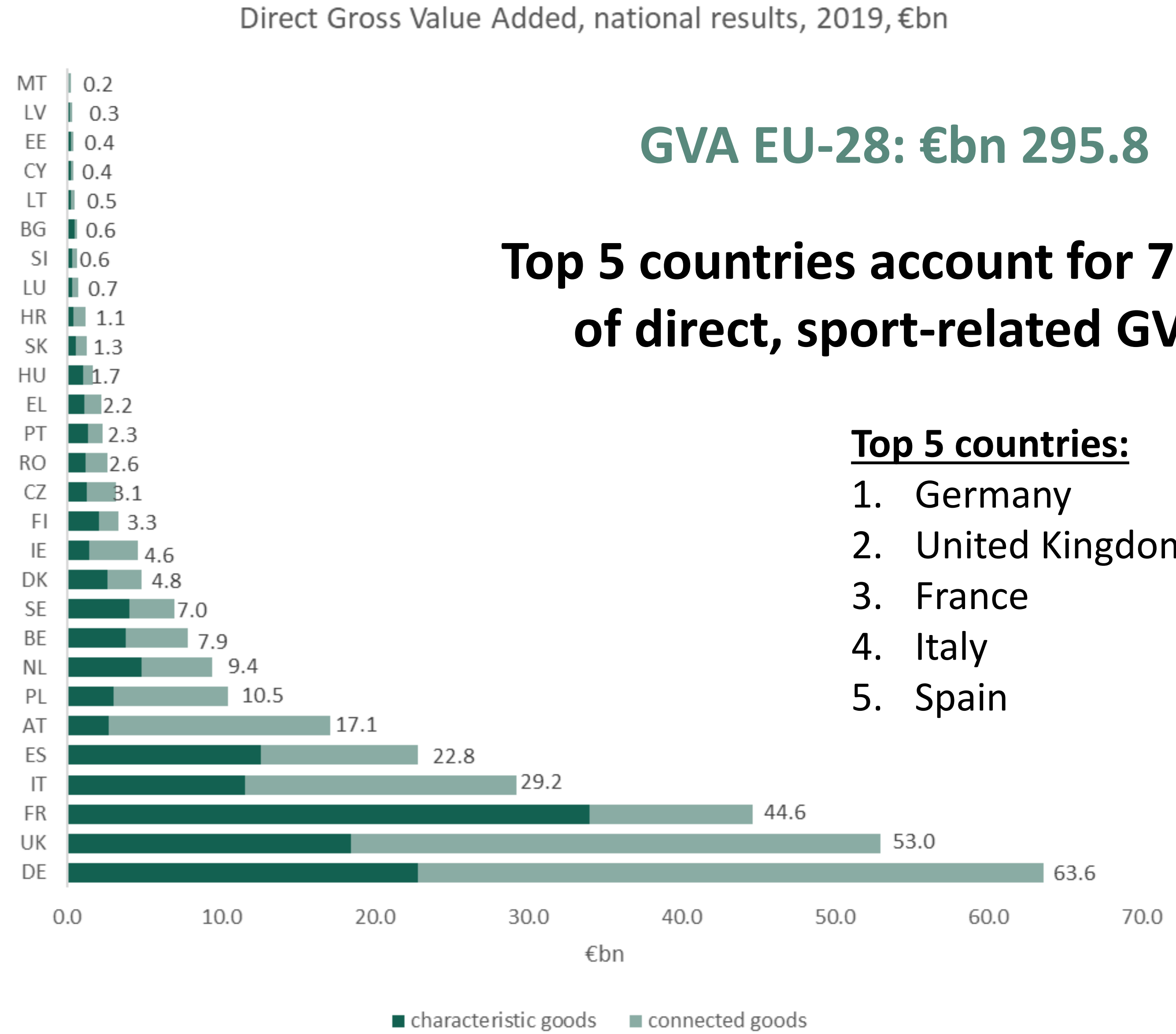
- 1. Three EU wide SSAs

- 2. MS that already have established national SSAs or are working towards their development:
  Austria, Belgium, Croatia, Cyprus, Estonia, Germany, Hungary, Lithuania, Luxembourg, the Netherlands, Portugal, Poland, Spain, Greece.

3. SSAs outside the EU: UK, Switzerland and Japan

4. Extension of SSAs in particular sports e.g. a Satellite Account of Golf by the R&A in the UK and in the Republic of Ireland.

EU-28 results: Direct Gross Value Added



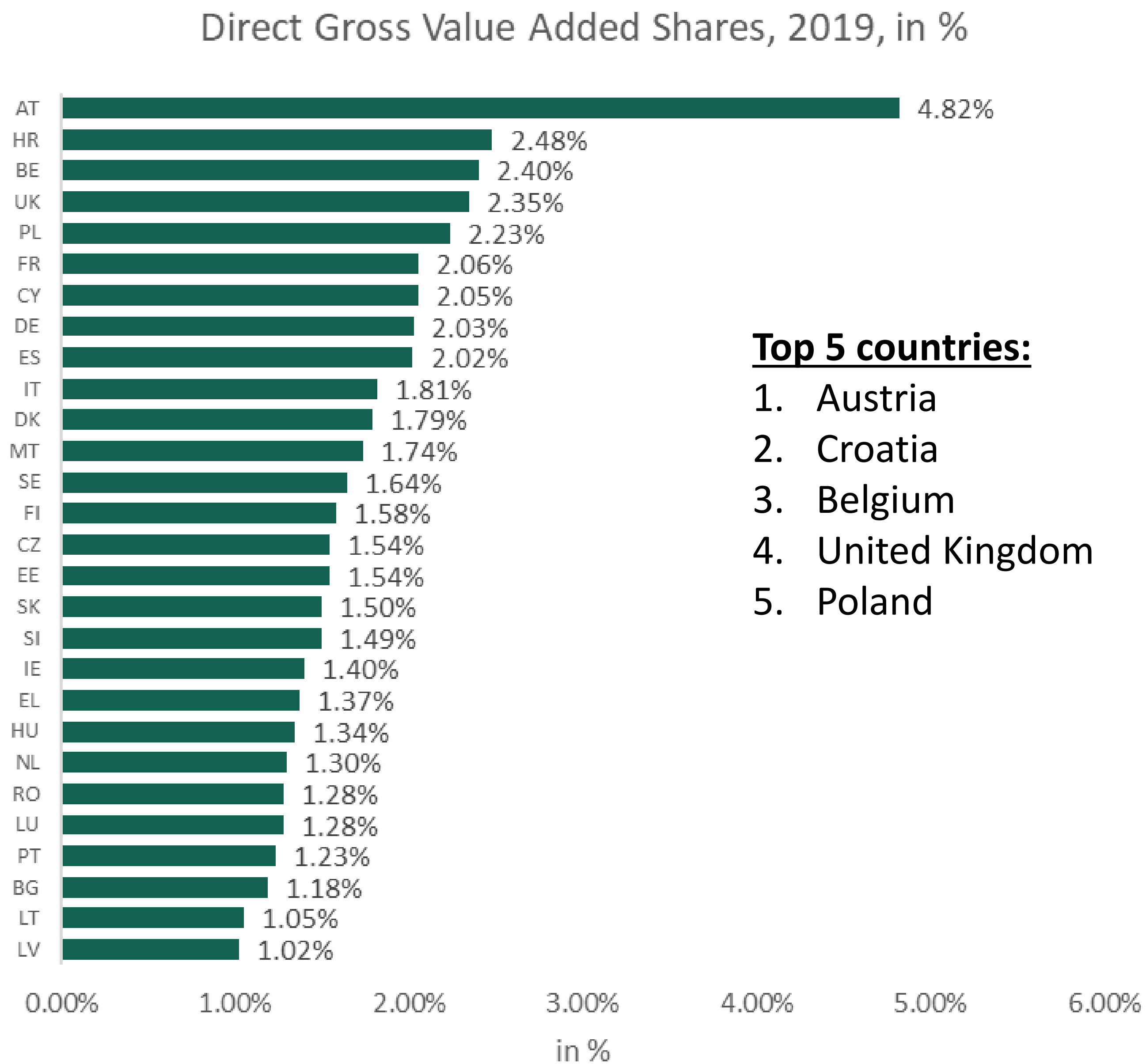
GVA EU-28: €bn 295.8

Top 5 countries account for 72.1% of direct, sport-related GVA

Top 5 countries:

1. Germany
2. United Kingdom
3. France
4. Italy
5. Spain

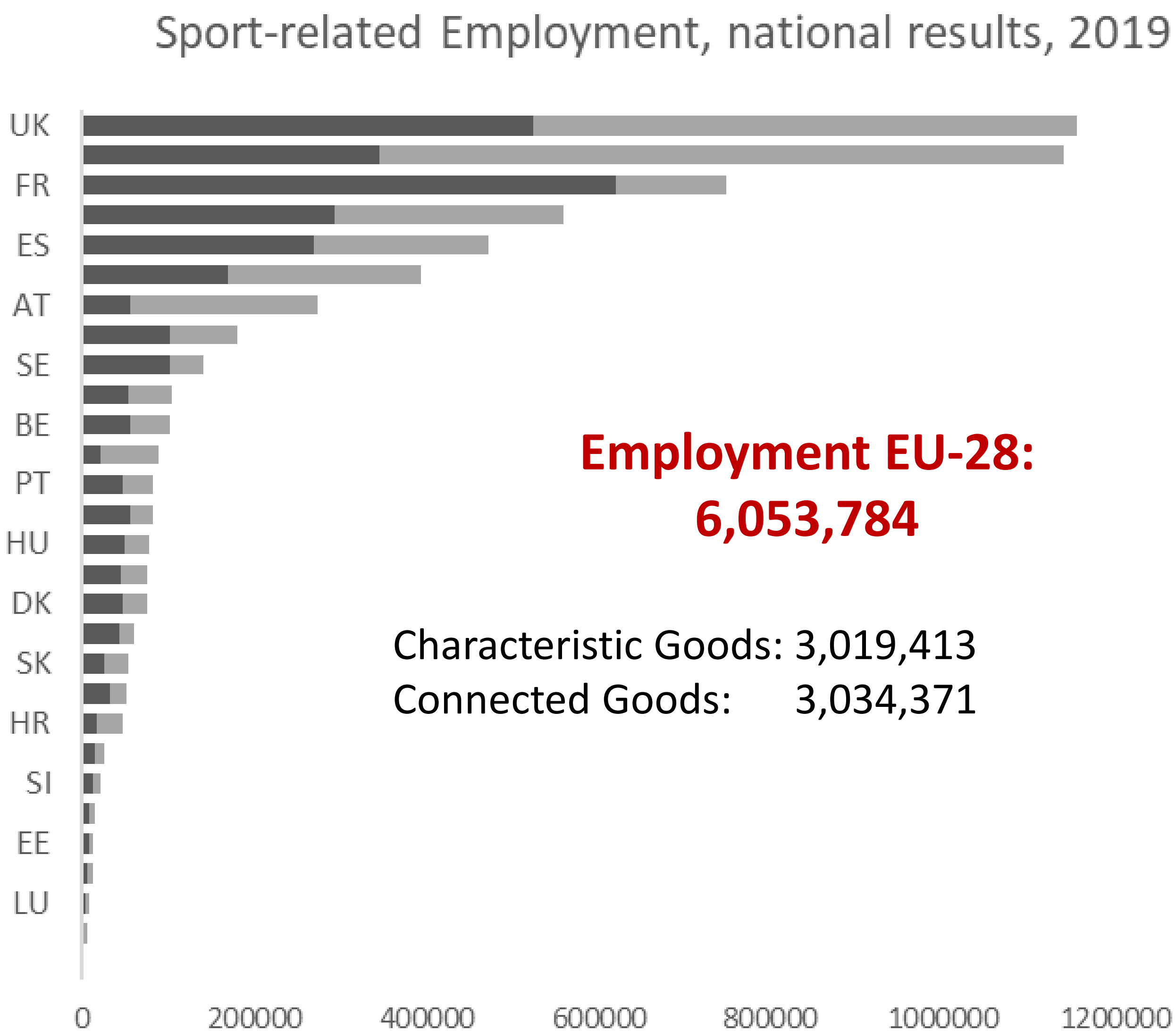
EU-28 results: Direct Gross Value Added



Top 5 countries:

1. Austria
2. Croatia
3. Belgium
4. United Kingdom
5. Poland

EU-28 results: Direct Effects on Employment



	Characteristic goods	Connected goods	Sport total
MT	2,229	2,759	4,988
LU	2,916	4,056	6,972
CY	6,037	5,299	11,336
EE	8,503	4,713	13,215
LV	6,961	6,611	13,571
SI	11,420	9,002	20,422
LT	15,150	10,389	25,539
HR	16,645	31,073	47,718
BG	31,100	20,587	51,687
SK	26,171	28,011	54,181
FI	41,951	18,281	60,232
DK	47,506	26,960	74,466
IE	44,120	30,439	74,559
HU	48,513	29,653	78,166
EL	55,986	25,097	81,082
PT	46,011	36,400	82,411
RO	20,532	67,969	88,502
BE	55,273	46,696	101,969
CZ	54,655	47,960	102,615
SE	102,066	38,160	140,225
NL	101,116	79,609	180,725
AT	55,611	218,657	274,268
PL	168,901	224,208	393,110
ES	268,339	203,886	472,224
IT	293,392	264,716	558,108
FR	619,242	128,406	747,647
DE	344,797	794,575	1,139,372
UK	524,273	630,201	1,154,474

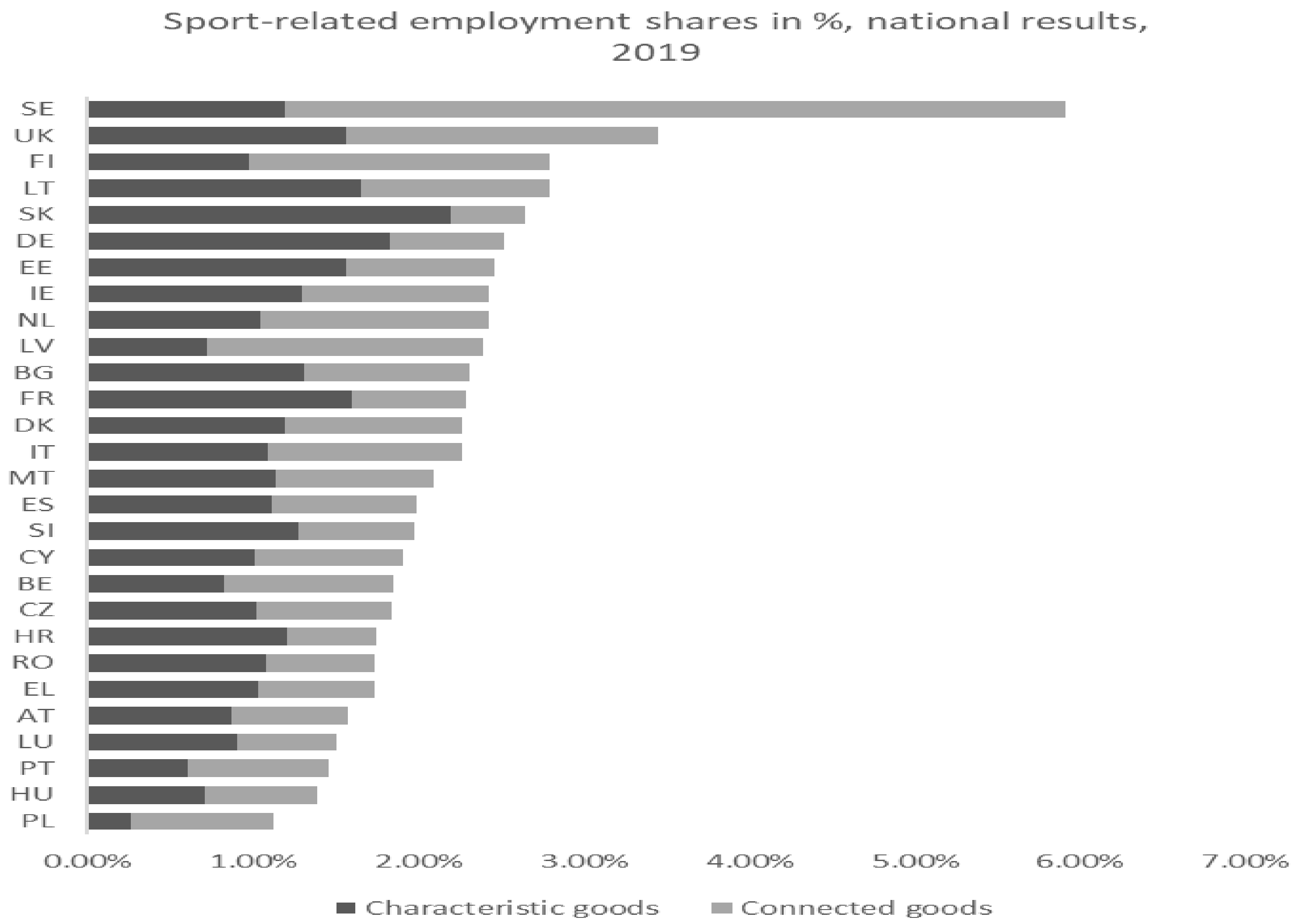

Sport-related employment shares in %, national results, 2019
SE
UK
FI
LT
SK
DE
EE
IE
NL
LV
BG
FR
DK
IT
MT
ES
SI
CY
BE
CZ
HR
RO
EL
AT
LU
PT
HU
PL
0.00%
1.00%
2.00%
3.00%
4.00%
5.00%
6.00%
7.00%
Characteristic goods
Connected goods

Table E1: Sport-related GDP, EU-28, 2019, €bn

	Direct		Indirect		Total		Multiplier
	€bn	Share	€bn	share	€bn	share	
Characteristic goods	165.5	0.90%	85.9	0.46%	251.4	1.36%	1.46
Connected goods	203.3	1.10%	172.8	0.94%	376.1	2.04%	1.68
TOTAL	368.8	2.00%	258.7	1.40%	627.5	3.40%	1.62

Source: Sheffield Hallam University, Econmove.

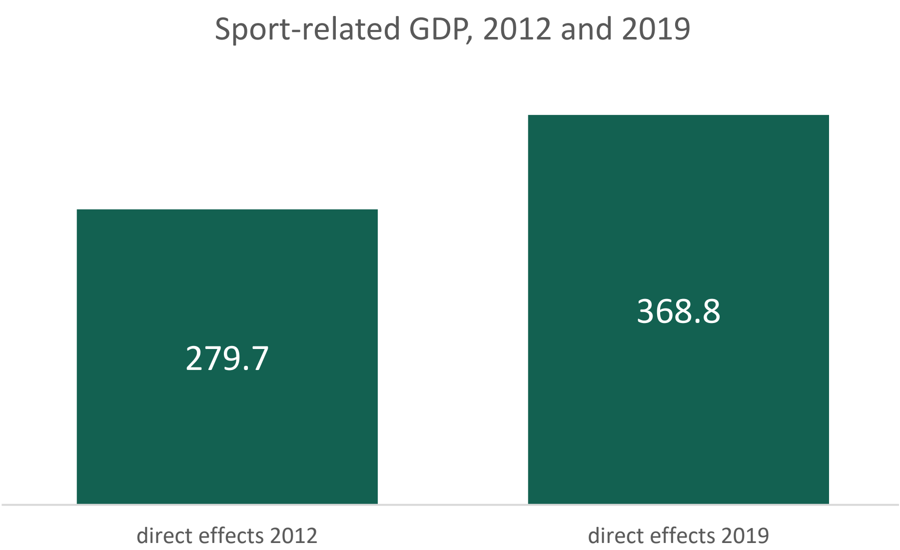
Table 3.3: Sport-related employment, EU-28, 2019, headcounts

	Direct		Indirect		Total		Multiplier
	Jobs	share	Jobs	share	Jobs	share	
Characteristic	3,019,413	1.24%	1,072,011	0.44%	4,091,424	1.68%	1.36
Connected	3,034,371	1.24%	2,148,797	0.88%	5,183,168	2.12%	1.71
TOTAL	6,053,784	2.48%	3,220,808	1.32%	9,274,592	3.80%	1.53

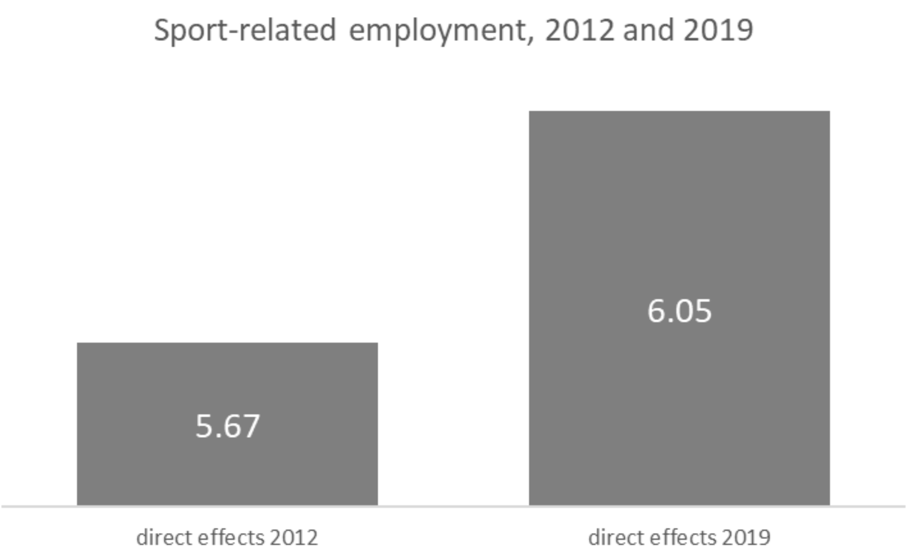
Source: Sheffield Hallam University, Econmove.

EU-28 results: Intertemporal Comparison GDP & Employment

+89.1 €bn



+0.38 m



Sport-related GDP (direct, EU-28):
2012: 2.11%
2019: 2.01%

Sport-related employment (direct, EU-28):
2012: 2.11%
2019: 2.48%

Factsheet: LITHUANIA

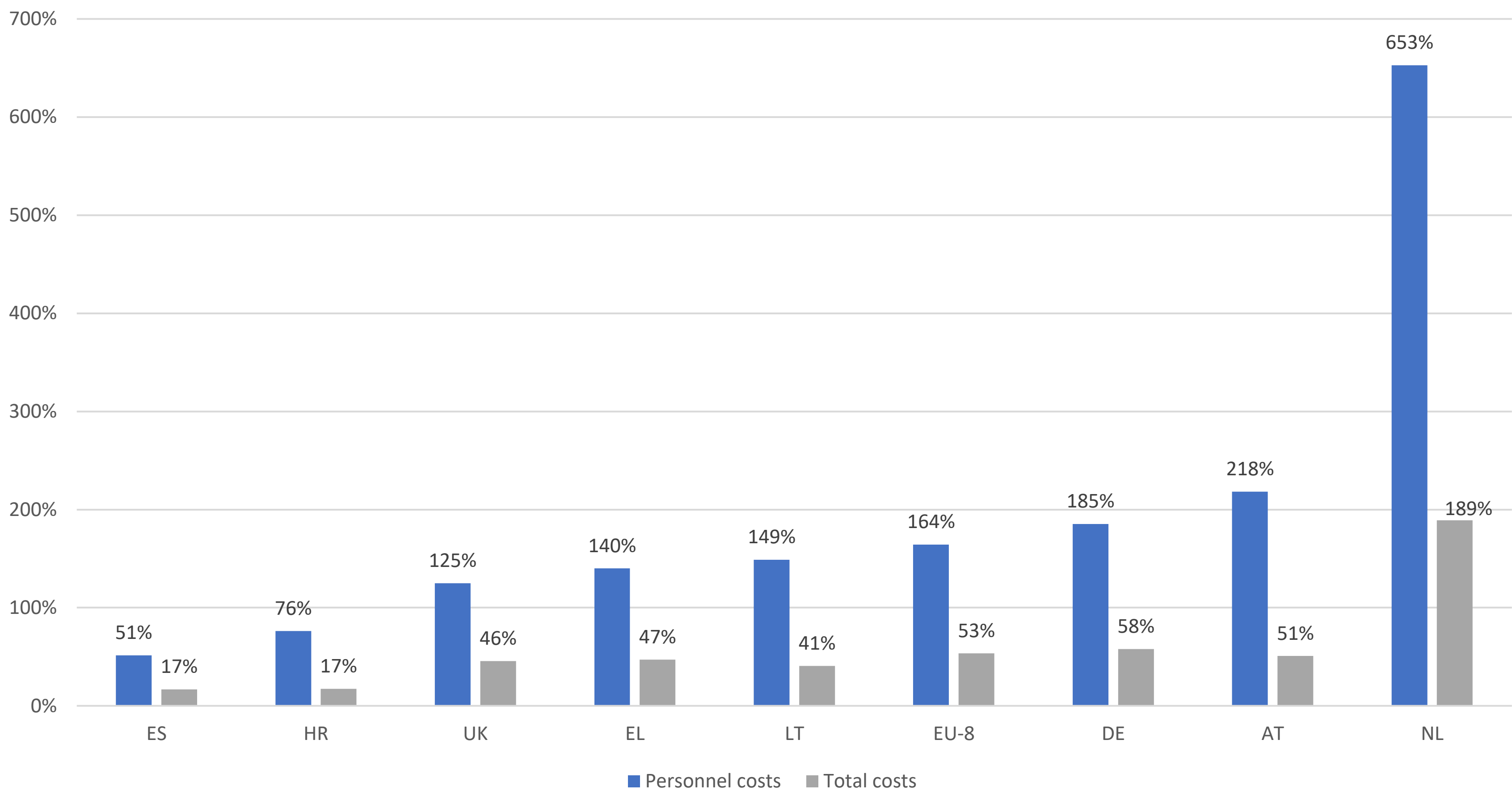
SPORTS			
	direct	indirect	total
Gross domestic product (€bn.)	**0.56**	**0.22**	**0.78**
Gross value added (€bn.)	**0.46**	**0.18**	**0.64**
Share	1.04%	0.41%	1.45%
Multiplier		1.39	
Employment (headcount)	**25,539**	**5,877**	**31,416**
Share	1.74%	0.40%	2.14%
Multiplier		1.23	

Top-10 sectors			
Gross Value Added (€m.)		**Employment (headcount)**	
Education services (P85)	141	Education services (P85)	10,134
Sporting services (R93)	64	Sporting services (R93)	4,765
Wholesale trade services (G46)	39	Retail trade services (G47)	1,929
Retail trade services (G47)	37	Creative, arts, entertainment; gambling and betting services (C90-92)	1,749
Creative, arts, entertainment; gambling and betting services (C90-92)	33	Other transport equipment (C30)	1,001
Other transport equipment (C30)	31	Wholesale trade services (G46)	848
Wholesale/retail trade/repair services of motor vehicles + motorcycles (G45)	11	Human health services (Q86)	751
Furniture and other manufactured goods (C31-32)	11	Accomodation and food services (I)	499
Food, beverages and tobacco products (C10-12)	8	Wholesale/retail trade/repair services of motor vehicles + motorcycles (G45)	419
Machinery and equipment n.e.c. (C28)	8	Textiles, wearing apparel, leather and related products (C13-15)	415

CHARACTERISTIC GOODS			
	direct	**indirect**	**total**
Gross domestic product (€bn.)	**0.26**	**0.09**	**0.35**
Gross value added (€bn.)	**0.21**	**0.07**	**0.28**
Share	0.48%	0.17%	0.65%
Multiplier		1.35	
Employment (headcount)	**15,150**	**2,487**	**17,637**
Share	1.03%	0.17%	1.20%
Multiplier		1.16	

CONNECTED GOODS			
	direct	**indirect**	**total**
Gross domestic product (€bn.)	**0.30**	**0.13**	**0.43**
Gross value added (€bn.)	**0.25**	**0.11**	**0.36**
Share	0.56%	0.24%	0.80%
Multiplier		1.43	
Employment (headcount)	**10,389**	**3,389**	**13,778**
Share	0.71%	0.23%	0.94%
Multiplier		1.33	

Increase of personnel and total costs if volunteers' work is to be substituted by paid employees



Sport infrastructure

Sport-related infrastructure is a substantial source of GVA for all economies. Direct effect can be average, but indirect GVA increases that value often to high levels.

Sport-related construction is frequently found to be one of the key-sectors and has a sectoral multiplier of 2.62 within the EU.

→ **Use construction of sport-infrastructure to stimulate many sectors.**

Sport infrastructure is a way of ensuring that a large share of GVA remains with the European Union.

Economic , employment and sustainability

Sport is employment intensive. In 26 out of 27 MSs, sport in general requires more employment than the average sector. Member States with low labour productivity have a relative advantage from building sport infrastructures and investing in sport. Hence sport can be used to address and limit inequalities among regions or countries.

→ **Use sport investment to counter unemployment.**

Typically, sport would show to be responsible for 1.8% of GVA and 2% of employment. Hence investing in sport would generate more employment than the average sector of the economy.

Government Surplus

The government has to invest to generate the benefits conveyed by sport.

The SSA allows to show the spending and the income to the government associated with sport.

In almost all cases we have examined the central governments enjoy a surplus if we consider the VAT revenue from sport goods and services.

Key messages

1. *Rises in sport participation have the potential to transform the sport economy and generate employment*
2. *The indirect impacts of sport become increasingly large as the sport sector interacts with the rest of the economy*
3. *Sport volunteering a major source of impact both in terms of shadow prices and in terms of social value*

Thank you!

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